

Talking Points

The Criteria and Calculations for Absolute Ratings and Improvement Ratings

(Elementary & Middle Schools - Grades 3 - 8)

These talking points provide general information on how the Absolute and Improvement Ratings are calculated for schools enrolling students in grades 3-8. To obtain more technical and specific information on school and district ratings, refer to the Annual Accountability Manual available on the EOC Web site at www.sceoc.org.

- South Carolina's education accountability system centers around one fundamental belief: **ALL children can achieve.**
- The system uses academic achievement standards to push schools and students toward higher performance and focuses on improving teaching and learning so students are equipped with a strong academic foundation.
- Every student is held to the same high standards, and every school and district is accountable for each of its students.
- The system is designed to evaluate annually the progress of each school and school district.
- The 2010 goal states, "South Carolina's student achievement will be ranked in the top half of states nationally. To achieve this goal, we must become one of the five fastest improving systems in the country." The goal is used to establish expectations.
- Continuous improvement is the key to meeting South Carolina's 2010 achievement goal. The ratings system is constructed to increase in rigor over time. The target for individual student performance established by the State Board of Education is a score of Proficient. Proficient means the student has met expectations and is well prepared for work at the next grade.

Basic information:

- A typical elementary school is defined as a school enrolling students in grades K-5, and a typical middle school enrolls students in grades 6-8.
- Any school that includes a grade on either side of the typical pattern will be viewed as part of that organizational pattern. For example, if a school includes grades K-6, it will be considered elementary. If a school includes grades 5-9, it would be considered a middle school. If a school includes two or more grades on either side of the typical pattern (e.g., 4-8), two report cards are issued.
- Each elementary and middle school receives two performance ratings and notification of AYP:
 - Absolute Rating** – based on the percentage of students meeting standards on the state's standards-based assessment Palmetto Achievement Challenge Test (PACT) during the school year on which the report card is based.
 - Improvement Rating** – based on the progress of longitudinally-matched, individual student data comparing PACT scores during the school year on which the report card is based to the previous year's for the purpose of determining student academic growth.

Adequate Yearly Progress – As required by the United States Department of Education through passage of the No Child Left Behind legislation, a notice about the school's status of adequate yearly progress is provided. AYP specifies statewide targets for all students in each student subgroup: racial/ethnic, economic, disability, limited English proficiency, and migrant status. **(Contact the State Department of Education for Information on AYP.)**

- Five terms are used in the ratings to describe the level of a school's performance:
 - Excellent** – School performance substantially exceeds the standards for progress toward the 2010 SC Performance Goal.
 - Good** – School performance exceeds the standards for progress toward the 2010 SC Performance Goal.
 - Average** – School performance meets the standards for progress toward the 2010 SC Performance Goal.
 - Below Average** – School is in jeopardy of not meeting the standards for progress toward the 2010 SC Performance Goal.
 - Unsatisfactory** – School performance fails to meet the standards for progress toward the 2010 SC Performance Goal.

What criterion is used to calculate ratings for elementary and middle schools?

- Student performance on the Palmetto Achievement Challenge Test (PACT).

Which students are included in the elementary and middle school ratings?

- Students enrolled in the school by the 45th day and at the time of testing are included in the school's Absolute Rating.
- Students included in the Improvement Rating are enrolled in the school by the 45th day and at the time of testing, whose data can be matched to the previous year and who have PACT scores for both years even if they attended a different school during the previous year.
- Students with disabilities are included as follows:
 - Students with accommodated administrations (assisted in some manner) are included in their school's ratings. Their scores are applied in the same manner as the performance of students taking PACT in its standard form.
 - Students taking modified assessments, including "off-level tests," are included in their school's ratings. Their scores are applied in the same manner as the performance of students taking PACT in its standard form. The percentage of students taking PACT assessments on grade level and "off-grade level" is reported.
- Students taking alternate assessments are included only in the district's ratings beginning in 2004.
- English Language Learners (students with limited English proficiency) are tested in accordance with federal guidelines.

How are Absolute Ratings calculated for elementary and middle schools?

- Ratings are calculated using a mathematical formula that results in an index reflecting the average performance level of students in the school.
- The index is calculated using the following mathematical formula:
 - Step 1** – multiply the points assigned to each of the five PACT score categories (below) by the number of student scores falling into each of those categories for each subject area tested (currently English/language arts and mathematics and beginning in 2005 science and social studies).

The PACT score categories and their assigned points are as follows:

Advanced	–	5 points
Proficient	–	4 points
Basic	–	3 points
Below Basic 2	–	2 points
Below Basic 1	–	1 point

(The Below Basic score category is split into two subcategories, Below Basic 2 and Below Basic 1, to measure performance among low scoring students.)

Test scores for students who should be tested but were not are assigned a point of 0.

Step 2 – Add the points for each category. The total is the sum of weighted scores.

Step 3 – Determine the total number of student scores in each subject area tested (English/language arts and mathematics).

Step 4 – Divide the sum of weighted scores (step 2) by the total number of scores (step 3), and round to the nearest tenth of a point. This is the Absolute Rating index.

■ The resulting index determines the school's Absolute Rating as follows:

Range of Indices Corresponding to Absolute Rating					
Year	Excellent	Good	Average	Below Average	Unsatisfactory
2004	3.5 and above*	3.1-3.4*	2.7-3.0	2.3-2.6	Below 2.3
2005	3.6 and above*	3.2-3.5*	2.8-3.1	2.4-2.7	Below 2.4
2006	3.7 and above*	3.3-3.6*	2.9-3.2	2.5-2.8	Below 2.5
2007	3.8 and above*	3.4-3.7*	3.0-3.3	2.6-2.9	Below 2.6
2008	3.9 and above*	3.5-3.8*	3.1-3.4	2.7-3.0	Below 2.7
2009	4.0 and above*	3.6-3.9*	3.2-3.5	2.8-3.1	Below 2.8
2010	4.1 and above*	3.7-4.0*	3.3-3.6	2.9-3.2	Below 2.9
2011	4.2 and above*	3.8-4.1*	3.4-3.7	3.0-3.3	Below 3.0
2012	4.3 and above*	3.9-4.2*	3.5-3.8	3.1-3.4	Below 3.1
2013	4.4 and above*	4.0-4.3*	3.6-3.9	3.2-3.5	Below 3.2
2014	4.5 and above*	4.1-4.4*	3.7-4.0	3.3-3.6	Below 3.3

* School must meet Adequate Yearly Progress (AYP) criteria for all students in each subject area and for percent tested.

Step 5 – For schools with an Excellent or Good Absolute Rating index, determine if Adequate Yearly Progress (AYP) for *all* students has been met.

Ratings will decrease one level for Schools with an Excellent or Good Absolute Rating, but which do not meet AYP for *all* students. For example, if a school had an index of 3.5 in 2004 but did not make AYP for *all* students, its rating would be lowered from Excellent to Good. Or if a school in 2004 had an index of 3.1 but did not make AYP for *all* students, its rating would be lowered from Good to Average.

Here is a sample calculation of an Absolute Rating for an elementary or middle school:

Subject Areas:
English/language arts & mathematics

Score Category	No. of scores		Score Category		Pts
Advanced	27	x	5	=	135
Proficient	35	x	4	=	140
Basic	110	x	3	=	330
Below Basic 2	42	x	2	=	84
Below Basic 1	19	x	1	=	19
Not Tested	5	x	0	=	0

Total No. of scores = 238 **Sum of weighted scores = 708**

$$708 \div 238 = 2.97$$

Rounded: 3.0

Absolute Rating: Good

Note: This school's index of 3.0 is a Good Absolute Rating through the year 2003.
From 2004 to 2007, a 3.0 index becomes Average, and from 2008 through 2011
it becomes Below Average. From 2012 through 2014, it becomes Unsatisfactory.

Met AYP? Yes/No

This school's index of 3.0 is a Good Absolute Rating. If the school meets AYP for *all* students, its rating will remain the same. If it does not, its rating decreases to Average.

How are Improvement Ratings calculated for elementary and middle schools?

- The improvement ratings are calculated using a mathematical formula that results in an index.
- Only PACT scores of students qualifying for inclusion in the Improvement Rating are used in the calculation.
- Students included in the Improvement Rating are those enrolled in the school by the 45th day and at the time of testing, whose data can be matched to the previous year, and who have PACT scores for both years even if they attended a different school during the previous year.
- The Improvement Rating index is calculated using the following mathematical formula:

Step 1 – multiply the points assigned to the PACT score categories by the number of student (those qualifying for inclusion in the Improvement Rating) scores falling into each of those categories for each subject area tested (currently English/language arts and mathematics and eventually science and social studies) during the school year for which the report card is based.

PACT Performance Levels	Range of Point Weights*
Advanced	5 points
Proficient	4 – 4.75 points
Basic	3 – 3.75 points
Below Basic 2	2 – 2.75 points
Below Basic 1	1 – 1.75 points
Not Tested	0

* Scale scores and their assigned point weights vary according to grade level and subject area tested. A table listing scale scores and their assigned point weights is in the Annual Accountability Manual available on the EOC Web site at www.sceoc.org.

Dividing the PACT performance levels into intervals helps identify small achievement changes for individual students over a period of time.

Step 2 – Add the points for the PACT score categories of qualifying students for each subject area tested. The total is the sum of weighted scores for all subject areas.

Step 3 – Determine the total number of student scores in each subject area tested (English/language arts and mathematics).

Step 4 – Divide the sum of weighted scores (step 2) by the total number of scores (step 3). This is the index for the school year on which the report card is based.

Step 5 – Using these same students, calculate a second index in the same manner using their PACT performance from the year prior. This is the index for the prior school year.

Step 6 – Calculate the difference between the indices by subtracting the index for the year prior from the index for the year on which the report card is based. Round the difference to the nearest tenth of a point. For example, if the current year's index is 3.57 and the prior year's index was 3.25, the difference is 0.32. Rounded to the nearest tenth of a point, 0.32 becomes 0.3.

Step 7 – The resulting index determines the Improvement Rating in accordance with the following values:

Rating	Improvement Index
Excellent	0.4 or greater
Good	0.3
Average	0.1–0.2
Below Average	0.0
Unsatisfactory	-0.1 or less

Here is a sample calculation of an Improvement Rating for an elementary or middle school:

Step 1 – Calculate an index for year on which report card is based by multiplying the point weights for the PACT score categories by the number of student (those qualifying for inclusion in the Improvement Rating) scores falling into each of those categories for each subject area tested.

Score Category	Point Weight*		Number of Students		Total Points
Advanced	5.00	x	10	=	50.00
Proficient	4.75	x	1	=	4.75
	4.50	x	0	=	0.00
	4.25	x	3	=	12.75
	4.00	x	15	=	60.00
Basic	3.75	x	24	=	90.00
	3.50	x	22	=	77.00
	3.25	x	25	=	81.25
	3.00	x	26	=	78.00
Below Basic 2	2.75	x	15	=	41.25
	2.50	x	10	=	25.00
	2.25	x	0	=	0.00
	2.00	x	5	=	10.00
Below Basic 1	1.75	x	5	=	8.75
	1.50	x	6	=	9.00
	1.25	x	8	=	10.00
	1.00	x	4	=	4.00
Totals			179	=	561.75

*Point weights were taken from the Scale Score to Point Weight Conversion Table available in the *Annual Accountability Manual* available on the EOC Web site at www.sceoc.org.

Step 2 – Divide the total points by the total number of students:

$$561.75 \div 179 = 3.138 \text{ (index for year on which report card is based).}$$

Step 3 – Calculate an index for the *prior year* by using the PACT performance of students (those qualifying for inclusion in the Improvement Rating) from the prior year.

Score Category	Point Weight*		Number of Students		Total Points
Advanced	5.00	x	8	=	40.00
Proficient	4.75	x	0	=	0.00
	4.50	x	1	=	4.50
	4.25	x	3	=	12.75
	4.00	x	16	=	64.00
Basic	3.75	x	23	=	86.25
	3.50	x	22	=	77.00
	3.25	x	27	=	87.75
	3.00	x	24	=	72.00
Below Basic 2	2.75	x	13	=	35.75
	2.50	x	10	=	25.00
	2.25	x	2	=	4.50
	2.00	x	6	=	12.00
Below Basic 1	1.75	x	5	=	8.75
	1.50	x	7	=	10.50
	1.25	x	6	=	7.50
	1.00	x	6	=	6.00
Totals			179	=	554.25

Step 4 – Divide the total points by the total number of students.

$$554.75 \div 179 = 3.096 \text{ (index for prior year).}$$

Step 5 – Subtract the index for prior year from the index for year on which report card is based.

$$3.138 - 3.096 = 0.042$$

Step 6 – Rounded to nearest tenth = 0.0 (Improvement Rating index)

Improvement Rating: Below Average

Adjustments to the Improvement Rating:

- A school's Improvement Rating is adjusted upwards one rating level, for example from Average to Good or from Good to Excellent, if it has experienced exceptional achievement gains among students belonging to demographic groups which historically have underachieved in South Carolina schools (HUGS). This adjustment to the Improvement Rating is intended to recognize and reward schools which are reducing the achievement gap.

HUGS are specific groups of students who historically have not achieved as well as the majority student group. HUGS include African-American students, Hispanic students, Native American students, students participating in the free or reduced price federal lunch program and students with non-speech disabilities.

The gain for the identified groups must be at least one standard deviation higher than the achievement gain for all students statewide. If a school accomplishes this achievement, a notice is printed on the front page of its report card immediately below the Improvement Rating.

■ Improvement Ratings for schools sustaining high achievement are established as follows:

- Schools maintaining an Excellent Absolute Rating for two consecutive years receive a Good Improvement Rating, and if the school's Improvement Rating index for all students is a positive number (e.g., greater than zero), the school's Improvement Rating will be elevated to Excellent.
- Schools achieving an Absolute Rating index of 4.8 or higher for two consecutive years will be awarded an Excellent Improvement Rating.